

Public Meeting Hazard Mitigation Plan Development

City of Framingham
July 11, 2022, via Zoom

- Portuguese:
<https://www.framinghamma.gov/HMPMeeting1-Portuguese>
- Spanish:
<https://www.framinghamma.gov/HMPMeeting1-Spanish>

Instructions

History of success in MA

- Commonwealth of MA (State Plan)
- City of Pittsfield (MVP/HMP)
- Town of Becket (MVP/HMP)
- Town of Blandford (HMP)
- Town of Dighton (MVP/HMP)
- Town of Dracut (MVP/HMP)
- Town of Fairhaven (MVP/HMP)
- Town of Lexington (MVP/HMP)
- Town of Ludlow (HMP)
- Town of North Reading (HMP)
- Town of South Hadley (HMP)
- Town of Wilmington (MVP/HMP)
- UMASS Amherst (HMP)

- Territory of American Samoa
- County of Maui
- American Indian Tribes
- South Central Region of Connecticut
- Towns in Vermont
- FEMA Mitigation Planning Support



Jamie Caplan, Project Manager



Darrin Punchard,
Deputy Project
Manager



Bill Bohn, Risk Assessment
Lead



David Murphy, Mitigation
Specialist

More Mitigation Measures, More Savings



**One dollar invested in mitigation =
six dollars U.S. saves in future costs**



- A sustained action to reduce or eliminate risk to people and property from natural hazards and their effects.

Benefits of Mitigation Planning



Identify cost-effective actions to reduce risk



Focus resources on greatest vulnerabilities



Build partnerships



Increase awareness of hazards and risk



Communicate priorities



Align with other town objectives



Save lives and money!

Phases of Emergency Management



- Building Resilient Infrastructure and Communities (BRIC)
- Flood Mitigation Assistance (FMA)
- Hazard Mitigation Grant Program (HMGP)
 - Only available after a Presidential Disaster Declaration

Acquisition

Floodwalls, Floodproofing

Elevating structures

Structural retrofits

Utility retrofits

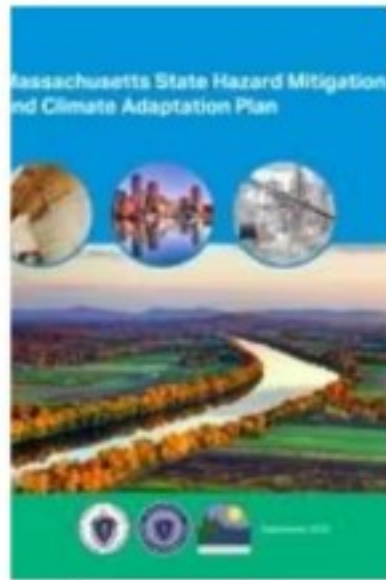
Slope stabilization

Drainage improvement

Hazard Mitigation Plan Development



Town of Framingham Hazard Mitigation Plan 2017 Update



State Hazard Mitigation and Climate Adaptation Plan 2018



Municipal Vulnerability Preparedness Program (MVP) 2019

2022 City of Framingham Hazard Mitigation Plan

Instructions



Who lives and works in the City of Framingham?



Who lives and works in the City of Framingham?



¿Quién vive y trabaja en la ciudad de Framingham?



Quem vive e trabalha na cidade de Framingham?

Who lives and works in the City of Framingham?

i work in Framingham

young professionals with growing families

Work only

Around 70.000 people live in Framingham

I work in Framingham

A large youth population

We have a very diverse community

first time homeowners

Elderly

Who lives and works in the City of Framingham?

people with disabilities

Long term family. 2 adult home owners

Retirees

farmers

Retired living in Framingham

Families
Young adults
people 60+
people in long term care facilities
multiple language groups
people with disabilities
retirees
homeless individuals

commuter rail

library

Hazard Mitigation Planning Committee (HMPC)



Provide supporting data or information.



Assist in the identification and prioritization of mitigation actions.



Review and comment on the draft plan.



Approve final draft for submission to MEMA.

What buildings, organizations, and infrastructure do these people rely on?



What buildings, organizations, and infrastructure do these people rely on?



¿De qué edificios, organizaciones e infraestructura dependen estas personas?



De quais edifícios, organizações e infraestrutura essas pessoas dependem?

What buildings, organizations, and infrastructure do these people rely on?

Schools

Framingham Public Schools

Senior center, daycares

Daniels Table, public transportation,
hospital

senior center

Memorial building. City offices

Municipal Buildings

places to buy food

Library, supermarket schools

What buildings, organizations, and infrastructure do these people rely on?

Library

Beaches

library

commuter rail

food pantries

shelters, supermarkets, public safety

Public safety buildings

MEMA

Streets

What buildings, organizations, and infrastructure do these people rely on?

Lodging

Medical care

Gas stations

public transportation

MWRTA

Mass Tpke

Senior Center, Conservation
Commisionn open space

Our home, our roads, municipal
buildings, green spaces, grid,

invest in drainage infrastructure

Critical Facilities - sample

- Memorial Building/City Hall
- Public Libraries
- State Police Headquarters
- Metro West Medical Center
- MEMA Headquarters
- CPFM Headquarters
- Framingham Emergency Operations Center
- Fire Department
- Public Works
- Schools
- Callahan Senior Center
- Police Headquarters
- Framingham Housing Authority
- Assisted Living and Nursing centers
- Framingham State University
- Helipads
- Reservoir Dams
- Water and Sewer Infrastructure
- Pumping Stations

What weather related hazards impact these people and/or buildings, organizations and infrastructure?



What weather related hazards impact these people and/or buildings, organizations and infrastructure?



¿Qué peligros relacionados con el clima afectan a estas personas y/o edificios, organizaciones e infraestructura?



Que perigos relacionados ao clima afetam essas pessoas e/ou edifícios, organizações e infraestrutura?

What weather related hazards impact these people and/or buildings, organizations or infrastructure?

Downed trees

Flooding

snow storms

flooding

snow storms, rain/flooding, fires,

ice

Heat rain COVID snow

hurricane

Draught

What weather related hazards impact these people and/or buildings, organizations or infrastructure?

Lightning

hurricanes, northeaster

4 seasons of extreme weather

Storms, drought

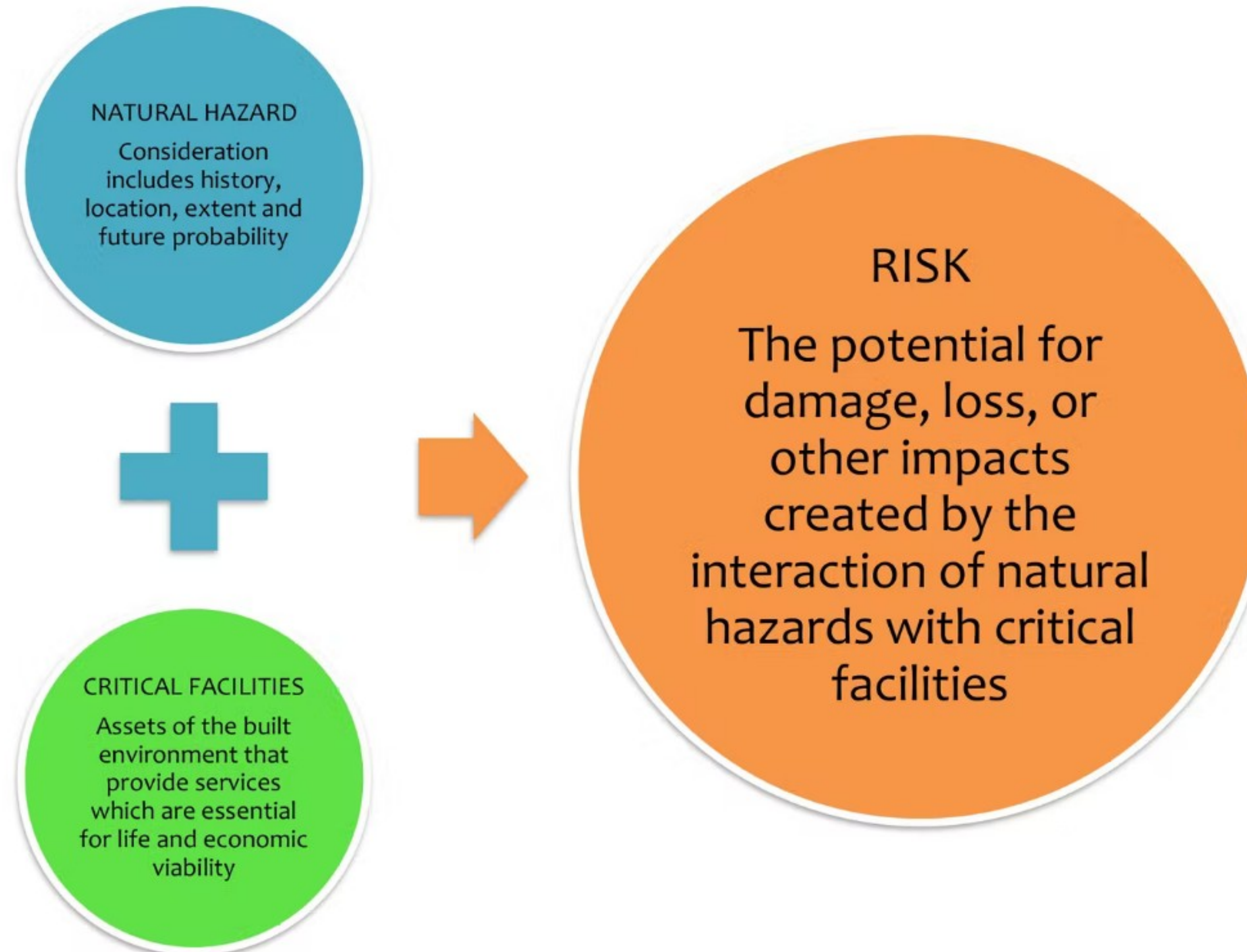
heat, humidity

Downed trees and power
linesBlizzardsDroughtExcessive heat

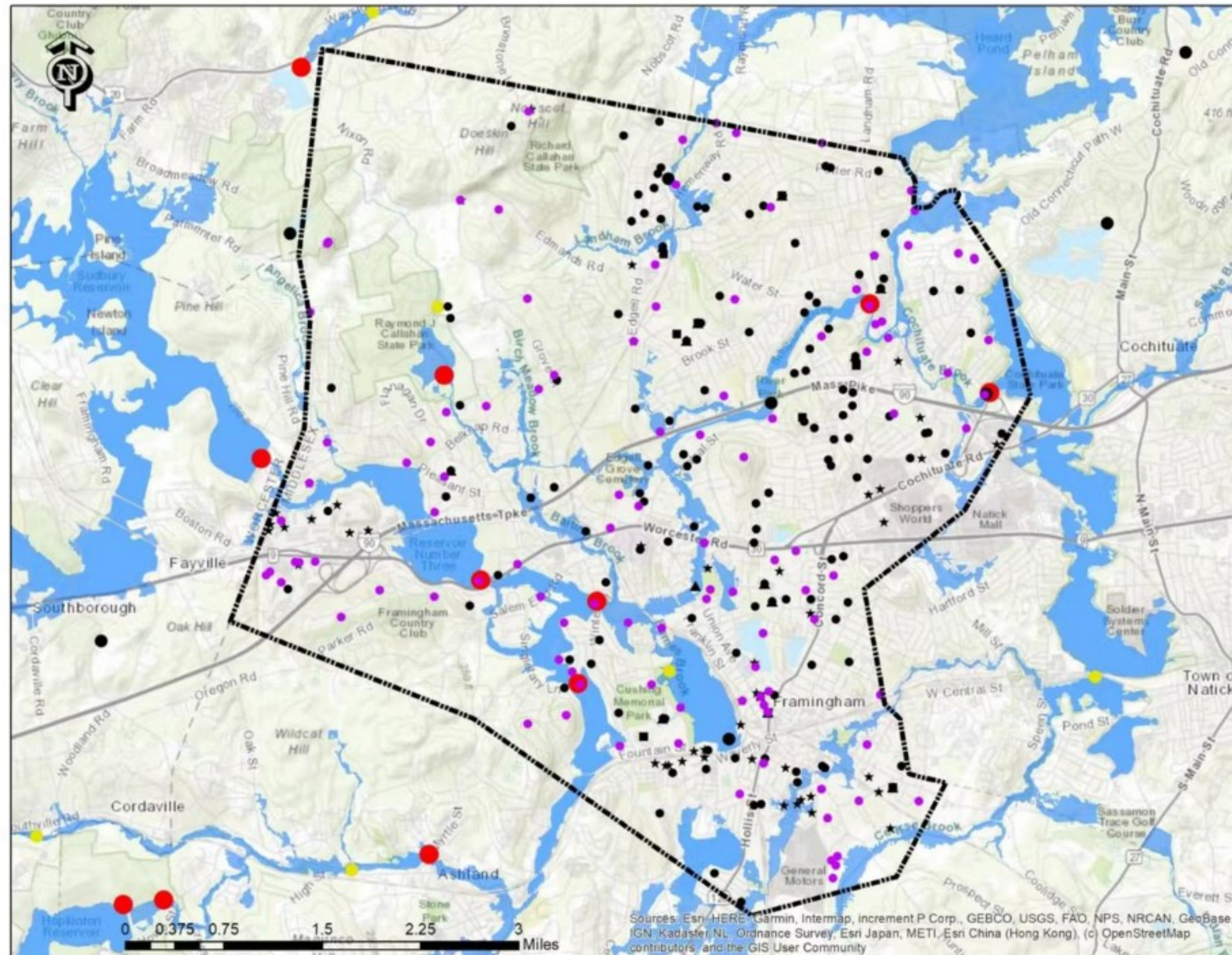
Hazards for Framingham's Hazard Mitigation Plan Update

Primary Climate Change Interactions	Natural Hazards
Changes in Precipitation	<ul style="list-style-type: none">• Flooding (<i>includes riverine, dam failures, ice jams, etc.</i>)• Drought• Landslide• Sinkholes
Rising Temperatures	<ul style="list-style-type: none">• Extreme Temperatures• Wildfires• Invasive Species• Infectious Disease
Extreme Weather	<ul style="list-style-type: none">• Hurricanes/Tropical Storms• Severe Winter Storm/Nor'easter (<i>includes blizzard, ice storm, etc.</i>)• Tornadoes• Other Severe Weather (<i>includes thunderstorms, etc.</i>)
Non-Climate Influenced Hazards	<ul style="list-style-type: none">• Earthquake

Risk Assessment Process



Critical Facilities and Floodplains



Floodplain Source:
FEMA

Legend

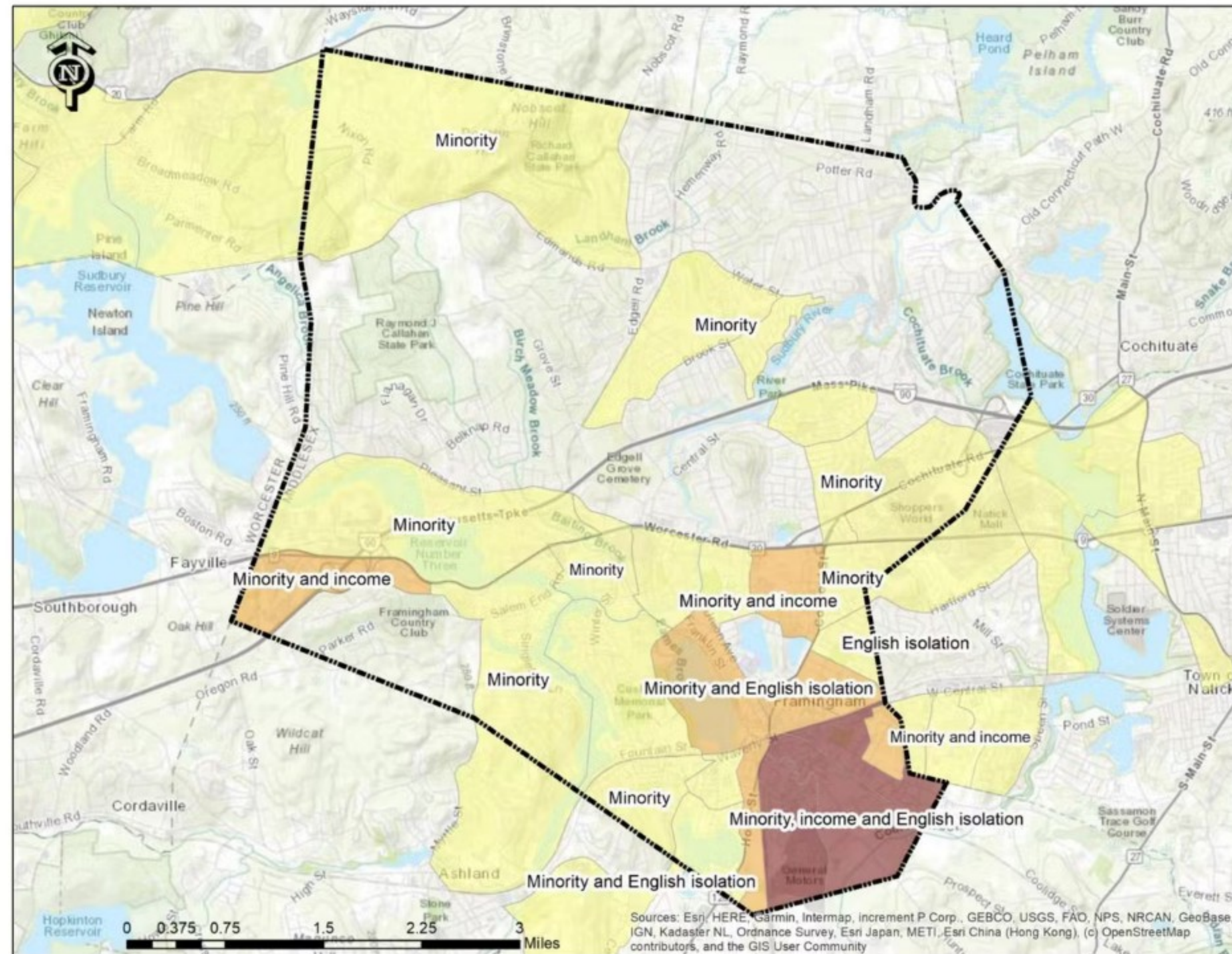
- Framingham
- Critical Facilities
- School
- Shelters
- Special Populations
- Tier 2 Chemicals

Dams

Hazard Code

- High Hazard
- Significant Hazard
- Low Hazard
- N/A
- 100-year Floodplain

Environmental Justice Communities



Source:
Massachusetts
Office of Energy and
Environmental
Affairs

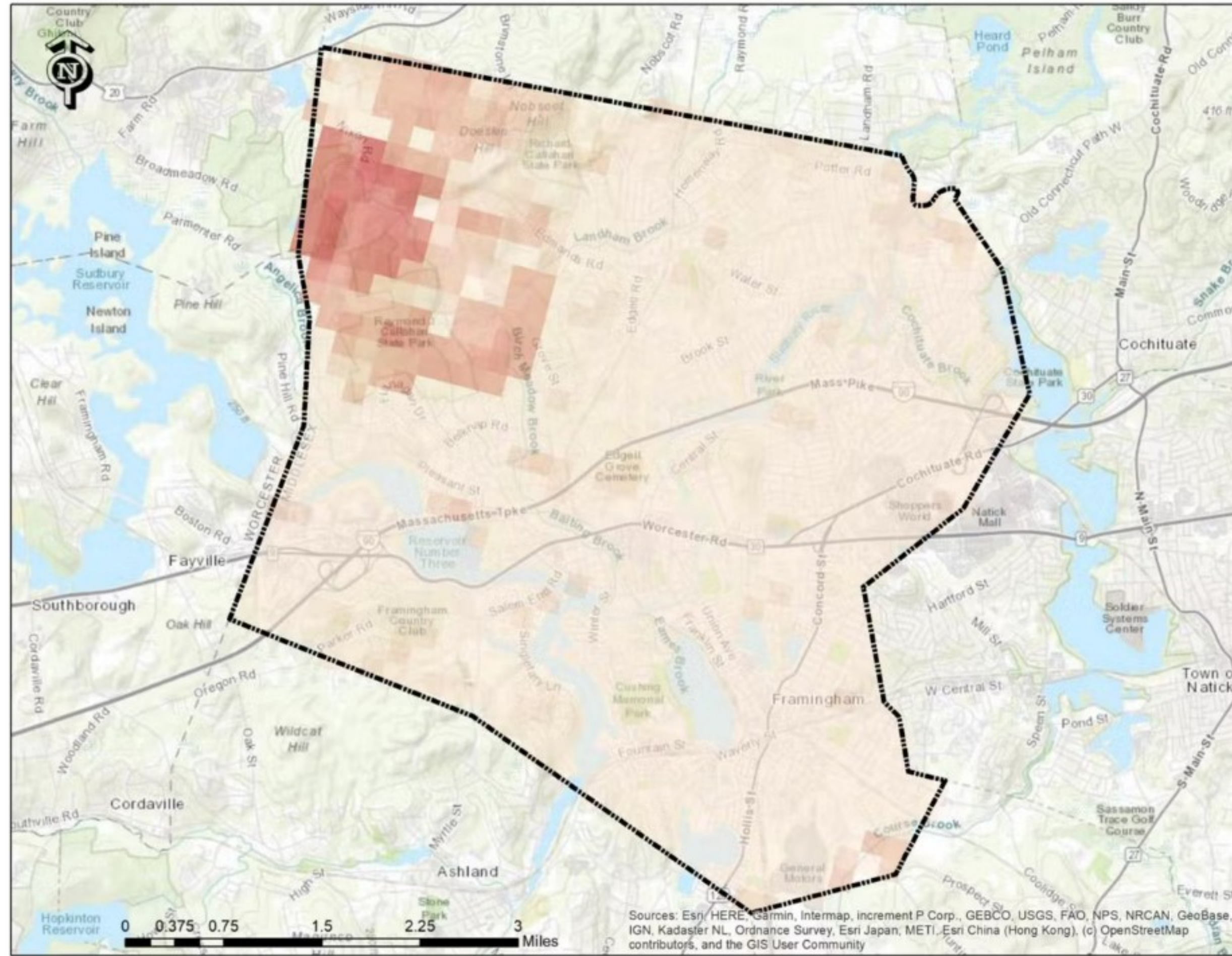
Legend

Framingham

Environmental Justice Criteria

- 1
- 2
- 3

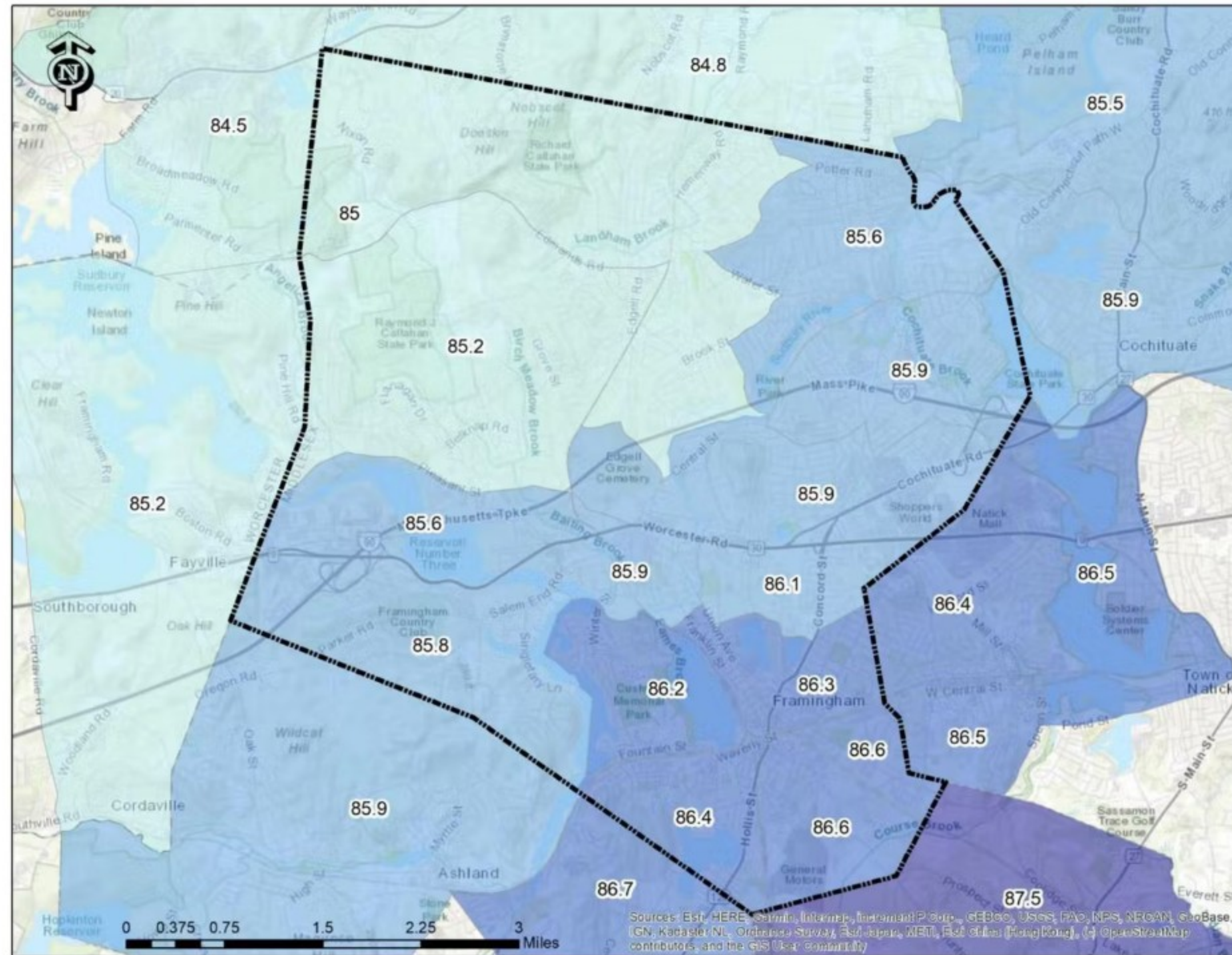
Wildfire Probability



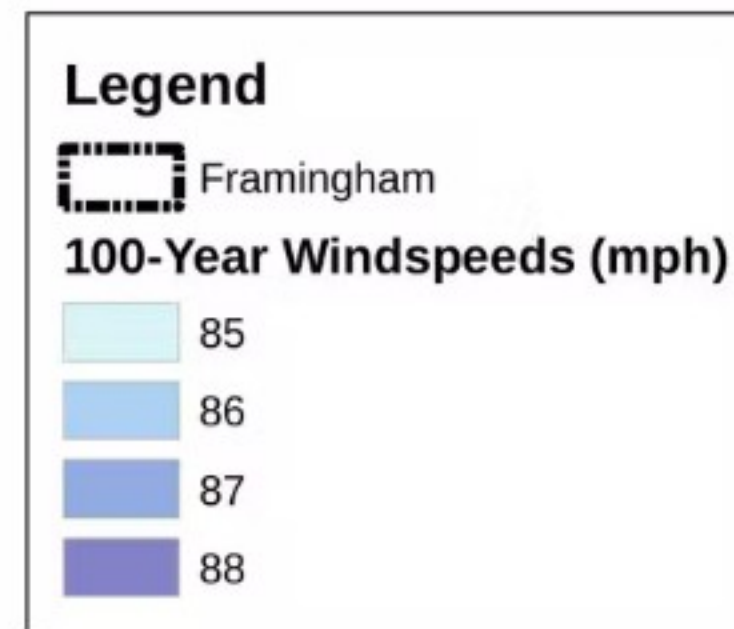
Source: United States Forest Service



100-Year Windspeeds



Source: ASCE 7-98



What can be done to lessen the impact of the hazards to protect people and property?



What can be done to lessen the impact of the hazards to protect people and property?



¿Qué se puede hacer para disminuir el impacto de los peligros para proteger a las personas y la propiedad?



O que pode ser feito para diminuir o impacto dos perigos para proteger pessoas e propriedades?

What can be done to lessen the impact of the hazards to protect people and property?

bioswales

Maintaining structures like streets and drains

trim trees to prevent limbs crashing on people/properties

be prepared - emergency drills

Facility hardening

Put utilities underground

maintaining open space so water can be absorbed

Pre wildfire preparation

Educate people to be prepared

What can be done to lessen the impact of the hazards to protect people and property?

Energy resiliency

Do not allow development in floodplains

Use geothermal to heat homes and builds

Strength community

solar panel rebates

Maintaining the walls on the rail trail to secure the ground above

Set up assistance to provide essentials during crisis

A Range of Mitigation Actions

1. Local Plans and Regulations
 - Comprehensive plans
 - Land use ordinances
 - Development review
 - Building codes and enforcement
 - Capital improvement programs
 - Open space preservation
 - Stormwater management regulations and master plans
2. Structure and Infrastructure Projects
 - Acquisitions and elevations of structures in flood-prone areas
 - Utility undergrounding
 - Structural retrofits
 - Floodwalls and retaining walls
 - Detention and retention structures
 - Culverts
3. Natural Systems Protection
 - Sediment and erosion control
 - Stream corridor restoration
 - Forest management
 - Conservation easements
 - Wetland restoration and preservation
4. Education and Awareness Programs
 - Radio or television spots
 - Websites with maps and information
 - Real estate disclosure
 - Presentations to school groups or neighborhood organizations
 - Mailings to residents in hazard-prone areas

Timeline

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Task 1. Convene Local HMPC		HMPC Meeting		HMPC Meeting		Public Meeting	HMPC Meeting			HMPC Meeting & Public Meeting	
Task 2. Update Hazard Profiles											
Task 3. Update Critical Facility Inventory											
Task 4. Update Mitigation Goals											
Task 5. Update Mitigation Actions											
Task 6. Plan Review, Evaluation, and Implementation											
Task 7. Public Review of Draft											
Task 8. Review and Approval											

Thank you

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